

BOND ESTIMATE SUMMARY FOR THE JIM GAY MINE  
INTERSTATE BRICK COMPANY  
ACT/049/005

Estimate Updated as of November 1985 - J.R. Harden

BOND ESTIMATE SUMMARY

A.	Removal of Structures and Equipment	\$ 0
B.	Removal of Trash	\$ 3,085
C.	Revegetation	\$ 27,906
D.	Safety	\$ 16,912
E.	Foundation Elimination	\$ 0
F.	Monitoring	\$ 2,061

=====

SUBTOTAL	\$ 49,964
----------	-----------

=====

Contingeny & Contractural @ 10%	\$ 4,996
---------------------------------	----------

-----

TOTAL ESTIMATE IN 1985\$	\$ 54,960
--------------------------	-----------

=====



ESCALATION SCHEDULE @ 3.79% per year (MEANS)

<u>DOLLAR YEAR</u>	<u>AMOUNT</u>
1985\$	\$ 54,960
1986\$	\$ 57,043
1987\$	\$ 59,205
1988\$	\$ 61,449
1989\$	\$ 63,778
1990\$	\$ 66,195
1991\$	\$ 68,704
1992\$	\$ 71,308
1993\$	\$ 74,010
1994\$	\$ 76,815
1995\$	\$ 79,726
1996\$	\$ 82,748
1998\$	\$ 85,884
1999\$	\$ 89,139
2000\$	\$ 92,518
2001\$	\$ 96,024
2002\$	\$ 99,663
2003\$	\$ 103,440
2004\$	\$ 107,361
2005\$	\$ 111,430
2006\$	\$ 115,653
2007\$	\$ 120,036
2008\$	\$ 124,586
2009\$	\$ 129,307
2010\$	\$ 134,208
2011\$	\$ 139,295
2012\$	\$ 144,574
2013\$	\$ 150,053
2014\$	\$ 155,740
2015\$	\$ 161,643
2016\$	\$ 167,769
2017\$	\$ 174,128
2018\$	\$ 180,727
2019\$	\$ 187,577
2020\$	\$ 194,686

The Operator may post bond for the entire mine life or permit term if desired in accordance with the above escalation schedule. As a minimum, the operator may post bond annually for the amount required in the next year's dollars. The escalation rate is updated annually by the Division and may reflect significant changes in the bond amount required over a 35 year mine life. It is recommended by the Division, that the aoperator post bond for a five year term rather than the life of the mine.



### UNIT COSTS FOR EQUIPMENT

Equipment costs are based on the Rental Rate Blue Book for Construction Equipment. Labor costs are based on the Means Site Work Cost Data 1985. Other Reclamation work as is required but is not contained in the above references will be cited as they occur.

Total adjusted hourly costs for equipment selected in the estimate are as follows:

1. D-8L DOZER

Estimated Total Hours -	144.6	
Weekly Cost	\$ 4,385.00	
Adjusted Hourly Cost per Hour		\$ 109.63
Operating Cost per Hour		\$ 31.45
Operator Cost per Hour		\$ 29.25
		-----
TOTAL HOURLY COST FOR D-8L DOZER		\$ 170.33

2. 980C LOADER

Estimated Total Hours -	42.1	
Weekly Cost	\$ 3,485.00	
Adjusted Hourly Cost per Hour		\$ 87.13
Operating Cost per Hour		\$ 31.65
Operator Cost per Hour		\$ 29.25
		-----
TOTAL HOURLY COST FOR 980C LOADER		\$ 148.03

=====

### OTHER RATES AND COSTS USED

Common Laborers (Means)	\$ 22.40	per hour
Supervisors (Means)	\$ 32.20	per hour
Operators (Means)	\$ 29.95	per hour



SEED MIX FOR THE JIM GAY MINE

SPECIES	PLS/AC	\$/LB PLS	\$/ACRE
GRASSES:			
Western Wheatgrass			
<u>Agropyron cristatum</u>	4.5	2.65	11.93
Streambank Wheatgrass			
<u>Agropyron riparium</u>	4.5	3.65	16.43
Siberian Wheatgrass			
<u>Agropyron sibericum</u>	1.5	1.12	1.68
Russian Wildrye			
<u>Elymus junceus</u>	1.5	3.45	5.18
Sheep Fescue			
<u>Festuca ovina</u>	1.5	1.24	1.86
Canby Bluegrass			
<u>Poa canbyi</u>	1.5	1.81	2.72
Sand Dropseed			
<u>Sporobolus cryptandrus</u>	.4	2.47	.99
FORBS:			
Alfalfa			
<u>Medicago sativa var Ladak</u>	.75	1.40	1.05
Small Burnet			
<u>Sanguisorba minor</u>	1.5	1.4	2.10
SHRUBS:			
Wyoming Big Sagebrush			
<u>Artemisia tridentata</u>			
<u>ssp wyomingensis</u>	0.75	45.00	33.75
Winterfat			
<u>Ceratoides lanata</u>	3.0	13.95	41.85
Gardner Saltbrush			
<u>Atriplex canescens</u>	1.5	19.00	28.50
TOTALS	23.9		\$ 148.04
(As of July 19, 1985 Costs)	=====		

Note - this application rate applies to hand broadcasting.

REVEGETATION COSTS FOR ESTIMATION

For Seed Mix - Use \$ 150.00 per acre for 50.1 acres

FERTILIZATION

For Fertilizer - Use \$ 45.00 per 100 lb

MULCH

None Used



A. Removal of Structures and Equipment

No Structures.

B. Removal of Trash

Equipment - 980C Loader

Productivity - 16 hrs

Cost - 16 hrs x \$ 148.03/hr = \$ 2,368

2 Laborers @ 16 hrs each

Cost - 2 x 16 hrs x \$ 22.40/hr = \$ 717

-----  
\$ 3,085  
=====

C. Rock Waste Areas

Existing Dumps and Pad

Equipment - D-8L Dozer

Productivity - 1020 cy/hr

12,125 cy / 1020 cy/hr = 11.9 hrs

Cost - 11.9 hrs x \$ 170.33/hr = \$ 2,027

Scarification of Disturbed Area - 50.1 acres

Equipment - D-8L Dozer w/ drawbar

Productivity - 1.5 ac/hr

50.1 ac / 1.5 ac/hr = 33.4 hrs

Cost - 33.4 hrs x \$ 170.33/hr \$ 5,689

Topsoil Replacement - 2.5 acres

Equipment - 980C Loader

Productivity - 150 cy/hr

2037 cy / 150 cy/hr = 13.6 hrs

Cost - 13.6 hrs x \$ 148.03/hr = \$ 2,013

Revegetation - 50.1 acres

Equipment (Scarification) - 980C Loader

Productivity - 4.0 ac/hr

50.1 ac / 4.0 ac/hr = 12.5 hrs

Cost - 12.5 hrs x \$ 148.03/hr = \$ 1,850

Equipment (Seeding) - Hand Broadcasting

Productivity - 1.2 ac/hr

50.1 ac / 1.2 ac/hr = 41.8 hrs

Cost - 41.8 hrs x \$ 22.40/hr = \$ 936



Equipment (Fertilizing) - Hand Broadcasting  
Productivity - 0.5 ac/hr  
50.1 ac / 0.5 ac/hr = 100.2 hrs  
Cost - 100.2 hrs x \$ 22.40/hr = \$ 2,240

Seed Mix \$ 150/ac  
Cost - 50.1 ac x \$ 150/ac = \$ 7,515

Fertilizer @ \$45/ 100 lb  
250 lb/ac x 50.1 ac = 12,525 lb  
Cost - 12,525 lb /100 x \$45/100 lb = \$ 5,636

-----  
\$ 27,906  
=====

D. Safety

Southern Portion of Pit

Equipment - D-8L Dozer  
Productivity - 530 cy/hr  
2,200 cy / 530 cy/hr = 4.2 hrs  
Cost - 4.2 hrs x \$ 170.33/hr \$ 715

Extreme Northern Slope of Pit

Equipment - D-8L Dozer  
Productivity - 530 cy/ hr  
7,200 cy / 530 cy/hr = 13.6 hrs  
Cost - 13.6 hrs x \$ 170.33/hr \$ 2,316

Within Northern End of Pit

Equipment - D-8L Dozer  
Productivity - 530 cy/ hr  
43,200 cy / 530 cy/hr = 81.5 hrs  
Cost - 81.5 hrs x \$ 170.33/hr \$ 13,881

-----  
\$ 16,912  
=====

E. Foundation Elimination

None.

November 1985  
ACT/049/005  
Bonding Estimate

Page 7 of 7.

F. Monitoring

Estimated @ 16 hrs per year for 4 yrs

16hrs / yr x 4 yrs = 64 hrs

Cost - 64 hrs x \$ 32.20/hr = \$ 2,061

=====

=====

SUBTOTAL \$ 49,964

=====

Contingeny & Contractural @ 10% \$ 4,996

-----

TOTAL ESTIMATE IN 1985\$ \$ 54,960

=====